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Claims:

- 1. A Livin-derived pro-apoptotic peptide.
- 2. A peptide as defined in claim 1, selected from any one of p30-Livin α and p28-Livin β .
- 3. A peptide as defined in any one of claims 1 or 2, wherein said p30-Livin α peptide comprises the sequence substantially as defined in SEQ. ID. NO.1, or functional analogues, derivatives or fragments thereof.
- 4. A peptide as defined in any one of claims 1 or 2, wherein said p28-Livin β peptide comprises the sequence substantially as defined in SEQ. ID. NO.2, or functional analogues, derivatives or fragments thereof.
- 5. A Livin-derived peptide selected from any one of p30-Livin α and p28-Livin β .
- 6. A peptide as defined in claim 5, wherein said p30-Livin α peptide comprises the sequence substantially as defined in SEQ. ID. NO.1, or functional analogues, derivatives or fragments thereof.
- 7. A peptide as defined in claim 5, wherein said p28-Livin β peptide comprises the sequence substantially as defined in SEQ. ID. NO.2, or functional analogues, derivatives or fragments thereof.
- 8. A peptide as defined in claim 5, wherein said p30-Livin α has the amino acid sequence as defined in SEQ. ID.NO.1.
- 9. A peptide as defined in claim 5, wherein said p28-Livin β has the amino acid sequence as defined in SEQ. ID.NO.2.

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10. A pharmaceutical composition for inducing and/or enhancing apoptosis, comprising as active ingredient at least one peptide as defined in any one of claims 1 to 9.

- 11. A pharmaceutical composition as defined in claim 10 for enhancing apoptosis, wherein said apoptosis is induced by a treatment or agent selected from any one of etoposide, anti-CD95/Fas, TNFa and staurosporine.
- 12. A pharmaceutical composition as defined in claim 10, for inducing programmed cell death.
- 13. A pharmaceutical composition as defined in claim 12, for inducing programmed cell death of malignant cells.
- 14. Use of a peptide as defined in any one of claims 1 to 9, as an agent for the induction of apoptosis.
- 15. Use of a peptide as defined in any one of claims 1 to 9, as an agent for the enhancement of apoptosis.
- 16. Use of a peptide as defined in any one of claims 1 to 9, as an agent for the induction of programmed cell death.
- 17. Use of a peptide as defined in any one of claims 1 to 9, as an agent for the induction of programmed cell death in malignant cells.
- 18. Use of a peptide as defined in any one of claims 1 to 9, as an agent for enhancing the sensitivity of cells to death-inducing treatments or agents.
- 19. The use as defined in claim 18, wherein said cells are malignant cells.

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20. Use of a pharmaceutical composition as defined in any one of claims 10 to 13, as an agent for enhancing the sensitivity of cells to death-inducing treatments or agents.

- 21. The use as defined in any one of claims 18 to 20, wherein said death-inducing treatments or agents are selected from any one of etoposide, anti-CD95/Fas, TNFα and staurosporine.
- 22. The use as defined in any one of claims 18 to 21, wherein said cells are malignant cells.
- 23. Method of preparation of a pharmaceutical composition for the induction of apoptosis, comprising the step of admixing any one of the peptides as defined in claims 1 to 9, with a pharmaceutically acceptable adjuvant, carrier or diluent, and optionally with at least one additional active agent.
- 24. Method of enhancing the sensitivity of cells to death-inducing treatments or agents, comprising the steps of:
- (a) Introducing a Livin-derived peptide as defined in any one of claims 1 to 9 into a cell; and
- (b) Treating said cell with death-inducing agents or treatments.
- 25. The method as defined in claim 24, wherein said cells are malignant cells.
- 26. Use of the pharmaceutical composition as defined in any one of claims 10 to 13 for the treatment of cancer.